

Communications Specialist
Proposed Grade---GS-15

A. Position Identity

Communications Specialist (IHSA) DDA, Position 0000. The Communications Specialist reports to the IHSA (Information Handling Systems Architect) and is the lead specialist for communications in the Office of the IHSA. He is a recognized expert in communications systems and is knowledgeable concerning communication networks architecture, networks nodal functions, equipment interoperation, and cryptographic matters.

B. Major Duties

1. Responsible for communications network, strategic planning, and evaluations. Included concerns are:

- o Network robustness
- o Time-phased adequacy of capacity
- o Effects of interface requirements with other systems
- o Degree of reliance to be placed upon network components provided by other agencies, based primarily on availability and priority considerations.

2. Responsible for review and analysis of network functionalities and components for total network compatibility. The development of the requirements for their nodal functions is a key concern.

3. Responsible for closely monitoring the development of communications protocols within the international community. Responsible for adopting or applying international standards, such as X.25, that may be applicable. Responsible for accrediting any changes in externally generated protocol standards required by unique aspects of the Agency's environment.

4. Responsible for strategic planning with respect to message dissemination and distribution systems. Concerns will include the hierarchical allocation of dissemination and distribution functions on a nonredundant basis. The objective will be to develop a strategic plan that leads to an integrated message dissemination and distribution function that may involve layered functionalities.

5. Responsible for strategic planning with respect to communications network switching systems. In this regard, he will monitor the development of packet switching system developments and

coordinate the Agency's planning with the technological development within the defense and intelligence community network switching. He will collect available documentation describing existing communications functionalities within the external community which might be relevant to the Agency's future needs.

6. Responsible for integrating long-range planning with respect to transmission and reception equipments into the overall information handling systems strategic plan. There will be concern in this regard that the long-range needs of other agencies for whom a service is being provided are adequately accommodated in the planning.

7. Responsible for planning and analysis with respect to secure communications equipments, focusing primarily on cryptographic equipment and TEMPEST requirements. Included in concerns with respect to internal and external secure communications will be:

- o User terminals
- o Encryption of electronically stored data
- o Secure voice
- o Ground loops involving computer and communications equipments which may produce or exacerbate TEMPEST problems.

8. Responsible for communications interface within the Office of the IHSA with associated agencies--principally Department of State and the Defense Communications Agency--relative to networks interoperation.

C. Evaluation Factors

1. Knowledge and Abilities

He should have expert knowledge of communications systems, with specific expertise in network architecture or message handling and switching systems. A general knowledge of communications protocols, TEMPEST, and cryptographic systems is also required.

He must have demonstrated knowledge, gained through participation in a significant management role, in the development process for communications systems. He must be able to apply that knowledge to strategic planning and to system design evaluations. In all his analyses and planning, he must be practical in terms of

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evaluating the potentialities of emerging technology and of the status or level of development of new functionalities. He must also be able to assess the interface characteristics of one communications system functionality with others.

He must have a demonstrated ability to work well with senior managers. In this context, he must be able to explain simply and lucidly what are the implications of various alternatives. He must be persuasive in presenting the solutions he believes are in the best interest of the Agency, although sometimes they may not be in concurrence with those of users or developers. In all cases, he must be able to accept adverse judgments gracefully.

2. Difficulty of Work

Able to deal with and report through Agency's top management decision processes relative to information handling issues. Since communications systems impact virtually every element of information handling systems, the involvement of the Communications Specialist will be pervasive.

He should have a general knowledge of the characteristics of all the adjunct elements which interact with communications systems, such as computers, mass storage devices, terminals, and printers. He must also have a good knowledge of the techniques of software implementation of communications functions. In dealing with systems software, the Communications Specialist must be able to structure unstructured problems involving the foregoing elements and direct efforts into high priority areas. In doing this, he must define the key issues and prioritize objectives. He must be able to develop the top-level problem description or system definition and then effectively structure the preferred allocation of resources to deal with it.

Able to effectively structure, charge, and guide analytic efforts. In the process, he will formulate the statement of work and structure an effective effort within prescribed limitations of time and scope. In most instances, this will require a high level of management as well as technical expertise; the time and scope will generally be sharply constrained to meet the exigencies of decision data, top-level inquiries, and program planning submittals. There must be knowledgeable and effective review of the work in progress and results. The results summarization must be clear and concise, focusing top-management's attention on the central issues or results.

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3. Responsibility

The analyses, technical discussions, strategic planning and STAT representations of the Communications Specialist will have a direct impact on the effectiveness of the annual application of over [] of the Agency's resources. The results of his work are subject to the guidance, review, and approval of the IHSA. As STAT forwarded, they will be subject to review and approval at both the directorate and DCI levels.

4. Personal Relationships

The position of Communications Specialist requires broad contact with experts and senior managers throughout the Agency and Community. The contacts will involve discussions of requirements, discussions of alternative approaches, and long-range implications of alternatives, and coordination of activities. Matters of discussion will frequently be controversial. The incumbent's role with external contacts will require tact and persuasiveness.

Internally, the Communications Specialist will be responsible for communications matters. He will be responsible for this aspect of strategic planning and harmoniously integrate systems software concerns into the total planning effort. He must have the self-confidence to seek and incorporate into his analyses and planning the best technical advice and analyses available.

5. Supervision and Guidance Received

The Communications Specialist receives his assignments and initiating guidance from the IHSA, including resources and priorities. In general, his assignments will be oral, and he will have occasional discussions with the IHSA or the Deputy to discuss progress and problems. He will act independently in executing his assignments.

His performance will be evaluated upon: the acceptance of plans and recommendations by senior Agency management, the degree to which the incumbent maintains good personal relationships with the Agency's technical leaders involved in his area, the effectiveness with which he functions at a systems level, and the management expertise displayed in developing strategic plans and policy.

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